

101539620

AMENDMENTS TO THE CLAIMS:

JC17 Rec'd PCT/PTO 17 JUN 2005

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A solid-state X-ray detector comprising :
a photosensitive sensor [[(1)]],
a scintillator [[(5)]], which converts the X-rays into radiation to which the sensor [[(1)]] is sensitive, and
an entry window [[(8, 9)]] through which the X-rays upstream of the scintillator [[(5)]] pass, ~~characterized in that~~
wherein the detector includes means for applying an electrical voltage between the entry window [[(8, 9)]] and the photosensitive sensor [[(1)]].
2. (currently amended): The X-ray detector as claimed in claim 1, ~~characterized in that~~
wherein the scintillator [[(5)]] comprises :
a substrate [[(8)]] and
a scintillating substance [[(7)]],
~~in that~~ wherein the substrate [[(8)]] is separate from the sensor [[(1)]], and ~~in that~~ the substrate [[(8)]] forms the entry window of the sensor [[(1)]].
3. (currently amended): The X-ray detector as claimed in claim 1, ~~characterized in that~~
wherein the scintillator [[(5)]] includes a scintillating substance [[(7)]], ~~in that~~ wherein the sensor [[(1)]] is used as substrate for the scintillating substance [[(7)]], ~~in that~~ wherein a foil [[(9)]] for protecting the scintillator [[(5)]] covers the scintillating substance [[(7)]] and ~~in that~~ wherein the foil [[(9)]] forms the entry window of the sensor [[(1)]].
4. (currently amended): The X-ray detector as claimed in ~~one of the preceding~~ claim[[s]] 1, ~~characterized in that~~ wherein [[it]] the detector includes means for the voltage to be applied substantially uniformly to the entry window [[(8, 9)]].

5. (currently amended): The X-ray detector as claimed in ~~one of the preceding~~ claim[[s]]
~~1, characterized in that~~ wherein the electrical voltage is modulated over time.

6. (currently amended): The X-ray detector as claimed in ~~one of the preceding~~ claim[[s]]
~~1, characterized in that~~ wherein an additional window [[(10)]] is placed on the scintillator [[(5)]],
without being fixed to the scintillator [[(5)]], and in that a moisture-impermeable seal [[(11)]]
fixes the additional window [[(10)]] and the sensor [[(1)]].

7. (currently amended): The X-ray detector as claimed in claim 6, ~~characterized in that~~
wherein the means for the voltage to be applied substantially uniformly comprise an electrical
junction [[(20)]] passing through the additional window [[(10)]].

8. (currently amended): The X-ray detector as claimed in claim 6, ~~characterized in that~~
wherein the means for the voltage to be applied substantially uniformly comprise a conducting
passage [[(30)]] passing through the seal [[(11)]].

9. (currently amended): The X-ray detector as claimed in claim 6, ~~characterized in that~~
wherein the means for the voltage to be applied substantially uniformly comprise a track [[(40)]]
made on the photosensitive sensor [[(1)]].

10. (new): The X-ray detector as claimed in claim 2, wherein the detector includes
means for the voltage to be applied substantially uniformly to the entry window.

11. (new): The X-ray detector as claimed in claim 3, wherein the detector includes
means for the voltage to be applied substantially uniformly to the entry window.

12. (new): The X-ray detector as claimed in claim 2, wherein the electrical voltage is
modulated over time.

13. (new): The X-ray detector as claimed in claim 3, wherein the electrical voltage is modulated over time.

14. (new): The X-ray detector as claimed in claim 4, wherein the electrical voltage is modulated over time.

15. (new): The X-ray detector as claimed in claim 2, wherein an additional window is placed on the scintillator, without being fixed to the scintillator, and in that a moisture-impermeable seal fixes the additional window and the sensor.

16. (new): The X-ray detector as claimed in claim 3, wherein an additional window is placed on the scintillator, without being fixed to the scintillator, and in that a moisture-impermeable seal fixes the additional window and the sensor.

17. (new): The X-ray detector as claimed in claim 4, wherein an additional window is placed on the scintillator, without being fixed to the scintillator, and in that a moisture-impermeable seal fixes the additional window and the sensor.

18. (new): The X-ray detector as claimed in claim 5, wherein an additional window is placed on the scintillator, without being fixed to the scintillator, and in that a moisture-impermeable seal fixes the additional window and the sensor.